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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,826	09/29/2003	John Voellmicke	DEP-5164	2220
27777 7590 01/18/2007 PHILIP S. JOHNSON JOHNSON & JOHNSON ONE JOHNSON & JOHNSON PLAZA NEW BRUNSWICK, NJ 08933-7003			EXAMINER RAMANA, ANURADHA	
			ART UNIT	PAPER NUMBER
			3733	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/18/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/673,826

Applicant(s)

VOELLMICKE, JOHN

Examiner

Anu Ramana

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-14, 16-18 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7, 9-14, 16-18, 21-23 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 22, 2006 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 7, 9-14, 16-18, 21-22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhatnagar et al. (US 2002/0049449A1) in view of Matukas (US 4,645,488).

Bhatnagar et al. disclose a syringe system or device for injecting bone cement including: a flexible delivery tube 44; a cannula 12; and a syringe or "delivery tube" 42 wherein the movement of the plunger within the delivery tube can be automated by attachment to an electromechanical or pneumomechanical servo system or "advancement means" (paras [0042]-[0045]).

Bhatnagar et al. disclose all elements of the claimed invention except for a syringe having flexible walls.

Matukas teaches a flexible syringe 10 with a flexible piston or plunger to reduce the frictional resistance between the material and the wall of the syringe or delivery tube (col. 2, lines 48-68, col. 3, lines 1-62 and col. 4, lines 15-26).

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Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a flexible syringe or delivery tube with a flexible plunger, as taught by Matukas, in the Bhatnagar et al. system, to reduce the frictional resistance between the material and the wall of the syringe or delivery tube.

Regarding claim 3, although the combination of Bhatnagar et al. and Matukas does not disclose the syringe barrel being made of PEEK, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the syringe of PEEK, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. See US 7,011,649 (col. 3, lines 38-54).

Regarding claims 5 and 9-14, although the combination of Bhatnagar et al. and Matukas do not disclose the claimed ranges, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have constructed the device of the combination of Bhatnagar et al. and Matukas with the claimed ranges of dimensions, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claims 16 and 17, it is very well known to store bone cement at cold temperature to increase its shelf life. Thus, prior to use, the syringe would be filled from bone cement stored at a cold temperature. Although the combination of Bhatnagar et al. and Matukas does not disclose the claimed ranges of temperatures, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have filled the delivery tube in the device of the combination of Bhatnagar et al. and Matukas with bone cement having the claimed temperatures, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bhatnagar et al. (US 2002/0049449A1) and Matukas (US 4,645,488) further in view of Sams (US 4,865,591).

The combination of Bhatnagar et al. and Matukas discloses all elements of the claimed invention except for a hand-held gun.

Sams teaches providing ratchet teeth on the plunger of a syringe and a complementary pawl in a hand-held gun to dispense fluid from the syringe (Figs. 2 and 3, col. 4, lines 59-68 and col. 5, lines 1-28).

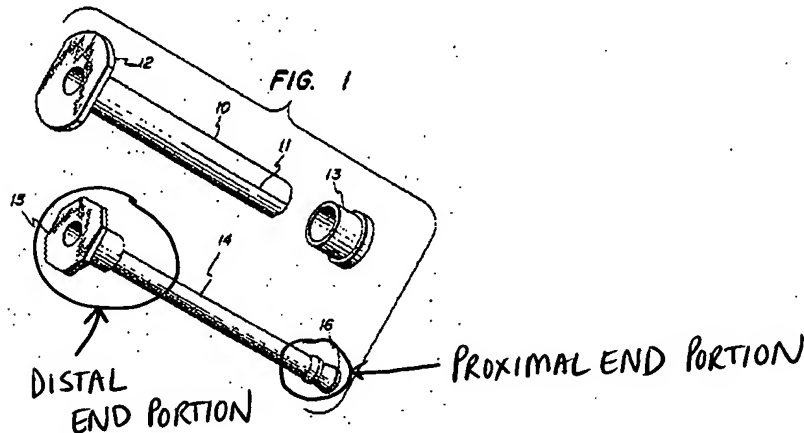
It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided ratchet teeth on the plunger in the device of the combination of Bhatnagar et al. and Matukas, as taught by Sams, to dispense accurately controlled but variable doses of fluid.

Response to Arguments

Applicant's arguments submitted under "REMARKS" in the response filed on December 22, 2006 have been fully considered but are not persuasive for the following reasons.

In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA) 1969. In this case, Matukas teaches a flexible syringe with a flexible piston to reduce frictional resistance during delivery of bone cement.

Matukas teaches that the plunger can be made of nylon, a flexible material, and that the piston can be made of either the same or different flexible material (col. 4, lines 15-26). It is further noted that Applicant is claiming that the plunger has a flexible proximal end portion. See marked up Fig. 1 below.



Conclusion

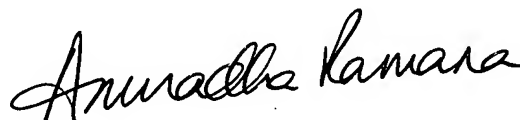
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anu Ramana whose telephone number is (571) 272-4718. The examiner can normally be reached Monday through Friday between 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached at (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AR
January 8, 2007

A handwritten signature in black ink, appearing to read "Anuradha Kamana". The signature is written in a cursive, flowing style.